

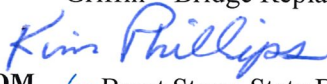
# DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

## OFFICE OF DESIGN POLICY & SUPPORT INTERDEPARTMENTAL CORRESPONDENCE

**FILE** P.I. # 0013928  
Spalding County  
GDOT District 3 - Thomaston  
SR 16 @ Flint River – 8 miles west of  
Griffin – Bridge Replacement

**OFFICE** Design Policy & Support

**DATE** 8/27/2018

  
**FROM** *for* Brent Story, State Design Policy Engineer

**TO** SEE DISTRIBUTION

**SUBJECT** APPROVED CONCEPT REPORT

Attached is the approved Concept Report for the above subject project.

Attachment

### DISTRIBUTION:

Hiral Patel, Director of Engineering  
Joe Carpenter, Director of P3  
Albert Shelby, Director of Program Delivery  
Darryl VanMeter, Assistant Director of P3/State Innovative Delivery Administrator  
Kim Nesbitt, Program Delivery Administrator  
Bobby Hilliard, Program Control Administrator  
Paul Tanner, State Transportation Planning Administrator  
Eric Duff, State Environmental Administrator  
Bill DuVall, State Bridge Engineer  
Andrew Heath, State Traffic Engineer  
Angela Robinson, Financial Management Administrator  
Erik Rohde, State Project Review Engineer  
Monica Flournoy, State Materials Engineer  
Patrick Allen, State Utilities Engineer  
Benny Walden, Statewide Location Bureau Chief  
Michael Presley, District Engineer  
Adam Smith, District Preconstruction Engineer  
Scott Parker, District Utilities Engineer  
Kenneth Wicks, Project Manager  
BOARD MEMBER - 3rd Congressional District

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA  
LIMITED SCOPE PROJECT CONCEPT REPORT**

Project Type: <u>Bridge Replacement</u>	P.I. Number: <u>0013928</u>	
GDOT District: <u>3</u>	County: <u>Spalding</u>	
Federal Route Number: <u>N/A</u>	State Route Number: <u>16</u>	
Project Number: _____	N/A	

**This project proposes to replace the bridge on SR 16 @ Flint River.**

**\*\* Report updated 7-12-2018 to address review comments**

**Submitted for approval:**

<u><i>Benjamin F. Rob III</i></u> Consultant Designer (Volkert, Inc.)	5/17/2018 Date <u>5/17/18</u>
<u><i>Kimberly W. Nesbitt</i></u> State Program Delivery Administrator	Date _____
<u><i>[Signature]</i></u> GDOT Project Manager	5/17/2018 Date _____

**Recommendation for approval:**

**\* Recommendations on file**

* <u>Eric Duff/KLP</u> State Environmental Administrator	5-22-2018 Date _____
for * <u>Christina Barry/KLP</u> State Traffic Engineer	6-1-2018 Date _____
* <u>Bill DuVall/KLP</u> State Bridge Engineer	6-13-2018 Date _____
* <u>Michael Presley/KLP</u> District Engineer	5-22-2018 Date _____

- ☐ MPO Area: This project is consistent with the MPO adopted Regional Transportation Plan (RTP)/Long Range Transportation Plan (LRTP).
- ☒ Rural Area: This project is consistent with the goals outlined in the Statewide Transportation Plan (SWTP) and/or is included in the State Transportation Improvement Program (STIP).

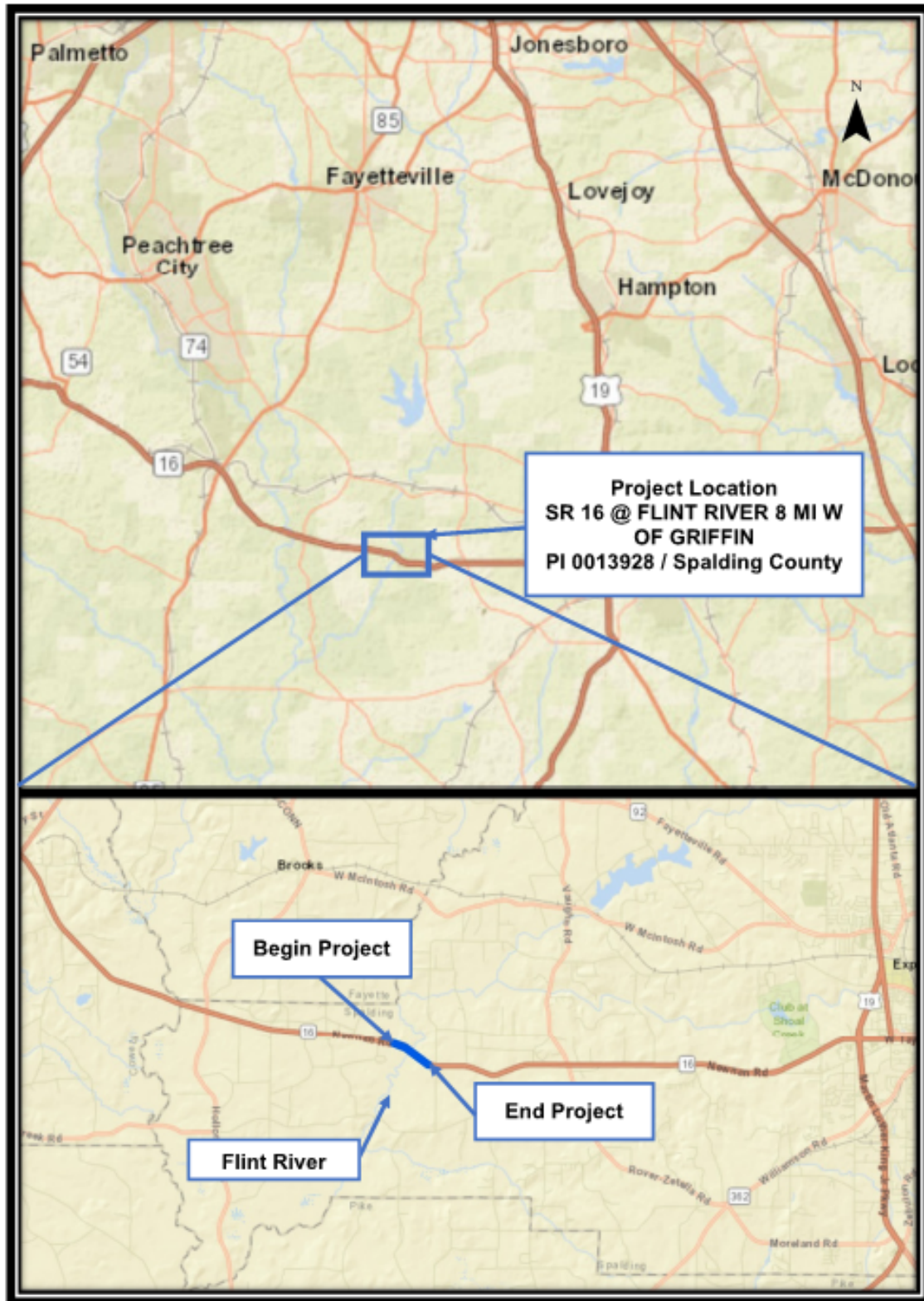
<u><i>Cynthia L. Van Dyke</i></u> State Transportation Planning Administrator	6-7-18 Date _____
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**Approval:**

Concur: <u><i>Heidi Ruel</i></u> GDOT Director of Engineering	7-24-18 Date _____
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Approve: <u><i>Margaret B. Pickle</i></u> GDOT Chief Engineer	7-24-18 Date _____
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## PROJECT LOCATION MAP



**PI 0013928 / Spalding County**  
**SR 16 @ Flint River Bridge Replacement**



## PLANNING & BACKGROUND DATA

**Project Justification Statement:** The bridge on SR 16 over Flint River, Structure ID 255-0012-0, was built in 1960. This bridge consists of three (3) main spans of steel beams with five (5) approach spans of Reinforced Concrete Deck Girders (RCDG's). The main spans rest on concrete caps with concrete columns, while the approach spans are on concrete caps with steel piles. The bridge was designed using an HS-20 vehicle, which is below current design standards. A structural analysis of this bridge shows a lower than expected carrying capacity in the substructure. The overall condition of this bridge would be classified as fair. The deck is in satisfactory condition with minor cracking throughout and spalls with exposed rebar. The superstructure is in satisfactory condition with deflection cracking and spalls with exposed rebar in the RCDG's. The substructure is in satisfactory condition with corrosion with section loss on the steel piles at the waterline and moderate abrasion on the concrete columns. This bridge is classified as having an unknown foundation and therefore could be at risk for scour. Due to the structural analysis of the structure, the structural integrity of the bridge pertaining to the design vehicle, and the unknown foundation of the substructure, replacement of this 57-year-old bridge is recommended. (Justification Statement was provided by Office of Bridge Design.)

**Existing conditions:** This section of SR 16 is located in Spalding County between the cities of Senoia and Griffin. The bridge structure, ID 255-0012-0, carries SR 16 over Flint River. The existing structure consists of three main spans of steel beams with five approach spans of Reinforced Concrete Deck Girders (RCDG's). The main spans are supported by concrete caps and concrete columns, and the approach spans are supported by concrete caps and steel piles. The typical section on the bridge consists of two lanes with a bridge roadway width of 28 ft. and a bridge deck out-to-out width of 34.4 ft. The approach roadway typical section consists of two 11.5-foot lanes with 3-foot paved shoulders.

**Other projects in the area:**

**MPO:** N/A - not in an MPO

**TIP #:** N/A

**Congressional District(s):** 3

**Federal Oversight:** ☐PoDI ☒Exempt ☐State Funded ☐Other

**Projected Traffic:** AADT 24 HR T: 21%  
Current Year (2018): 7865 Open Year (2023): 7525 Design Year (2043): 9200  
Traffic Projections Performed by: Volkert, Inc.  
Date approved by the GDOT Office of Planning: Pending

**Functional Classification (Mainline):** Rural Minor Arterial

**Complete Streets - Bicycle, Pedestrian, and/or Transit Standards Warrants:**

Warrants met: ☒None ☐Bicycle ☐Pedestrian ☐Transit

### Pavement Evaluation and Recommendations

Initial Pavement Evaluation Summary Report Required?	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes
Initial Pavement Type Selection Report Required?	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes
Feasible Pavement Alternatives:	<input checked="" type="checkbox"/> HMA	<input type="checkbox"/> PCC <input type="checkbox"/> HMA & PCC

## DESIGN AND STRUCTURAL

**Description of Proposed Project:** The project proposes replacing the bridge on SR 16 over Flint River in Spalding County, located approximately 8.6 miles east of Senoia. The total length of the project is approximately 0.92 miles with the project termini located 1450 ft. to the west of the existing bridge abutment and 3050 ft. to the east of the existing bridge abutment. The proposed structure is a 480-foot long by 43.25-foot wide bridge over Flint River, which will be constructed adjacent to the existing alignment, offset and parallel to the north of the existing bridge.

**Major Structures:**

Structure ID	Existing	Proposed
ID 255-0012-0 Along S.R. 16 @ Flint River	S.R. 16 consists of Structure ID 255-0012-0, which is a bridge that consists of three main spans of steel beams with five approach spans of Reinforced Concrete Deck Girders (RCDG's). The main spans are supported by concrete caps and columns, and the approach spans are supported by concrete caps with steel piles. The bridge deck width is 34.4 ft. and the bridge roadway curb to curb width is 28.0 ft. The total length of the bridge is 380 ft.	The proposed structure is a 480-foot long by 43.25-foot wide bridge. This includes two 12-foot travel lanes and 8-foot shoulders on both sides of the bridge.

**Accelerated Bridge Construction (ABC) techniques anticipated:** ☒ No ☐ Yes

This bridge replacement project lends itself to constructing the proposed bridge on new alignment to the north of the existing alignment due to site conditions – limited impacts to property along the new alignment and length of bridge.

Accelerated Bridge Construction techniques are not recommended for this project based on the following considerations:

- NEXT Beams are limited to a maximum 80' and therefore do not meet the necessary span length requirements to span the river.
- Cored Slabs and Adjacent Box Beams do not meet the necessary span length. The projected ADT and % trucks criteria exceed the guidance provided in the GDOT bridge manual.
- A Lateral Slide or Self-Propelled Modular Transport would require construction of the entire bridge adjacent to the existing structure. The site preparation for the SPMT construction method would require extensive grading in the flood plain and underneath the existing bridge to provide a stabilized level surface. It is anticipated that the hydraulic opening for this structure will result in a longer bridge structure requiring removal of existing roadway embankment and construction of substructure units. These techniques would require extended road closure and off-site detour for demolition, excavation, substructure construction and bridge placement. For these reasons, neither the use of SPMTs nor a Lateral Slide were considered to be feasible.

**Mainline Design Features: SR 16 @ Flint River**

Feature	Existing	Policy	Proposed
<b>Typical Section</b>			
- Number of Lanes	2		2
- Lane Width(s)	11.5 ft.	11 – 12 ft.	12 ft.
- Median Width & Type	N/A	N/A	N/A
- Outside Shoulder Width	3 ft.	10 ft.	10 ft.
- Paved	3 ft.	4 ft.	4 ft.
- Outside Shoulder Slope	Unknown	6%	6%
- Inside Shoulder Width	N/A	N/A	N/A
- Sidewalks	N/A	N/A	N/A
- Auxiliary Lanes	N/A		N/A
- Bike Accommodations	N/A	N/A	N/A
Posted Speed	55 mph		55 mph
Design Speed	55 mph	55 mph	55 mph
Minimum Horizontal Curve Radius	Unknown	1060 ft.	1600 ft.
Maximum Superelevation Rate	Unknown	6% - 8%	5.6%
Maximum Grade	Unknown	5%	5%
Access Control	By Permit	By Permit	By Permit
Design Vehicle	WB-67		WB-67
Pavement Type	HMA		HMA

Is the project located on a NHS roadway? ☒ No ☐ Yes

Design Exceptions/Design Variances to GDOT and/or FHWA Controlling Criteria anticipated: None

Design Variances to GDOT Standard Criteria anticipated: None

Lighting required: ☒ No ☐ Yes

Off-site Detours Anticipated: ☒ No ☐ Undetermined ☐ Yes

Transportation Management Plan [TMP] Required: ☐ No ☒ Yes

If Yes: Project classified as: ☒ Non-Significant

TMP Components Anticipated: ☒ TTC

## INTERCHANGES AND INTERSECTIONS

Major Interchanges/Intersections: N/A

Intersection Control Evaluation (ICE) Required: ☒ No ☐ Yes

Roundabout Peer Review Required: ☒ No ☐ Yes ☐ Completed – Date:

## UTILITY AND PROPERTY

Railroad Involvement: None

### Utility Involvements:

Central Ga EMC (Electric Distribution)

AT&T (Telecommunication)

Spalding County Water (Water)

SUE Required: ☒ No ☐ Yes

Public Interest Determination Policy and Procedure recommended? ☒ No ☐ Yes

Right-of-Way: Existing width: 70ft. Proposed width: 170ft.  
Required Right-of-Way anticipated: ☐ None ☒ Yes ☐ Undetermined  
Easements anticipated: ☐ None ☒ Temporary ☒ Permanent ☒ Utility ☐ Other

The permanent easements being proposed need to be purchased with the right to place utilities.

Anticipated total number of impacted parcels:	<u>12</u>
Displacements anticipated:	Businesses: <u>0</u>
	Residences: <u>0</u>
	Other: <u>0</u>
Total Displacements:	<u>0</u>

Impacts to USACE property anticipated? ☒ No ☐ Yes ☐ Undetermined

## CONTEXT SENSITIVE SOLUTIONS

Issues of Concern: None

**Context Sensitive Solutions Proposed:** None

## ENVIRONMENTAL AND PERMITS

### Anticipated Environmental Document:

**NEPA:** ☐ PCE ☒ CE ☐ EA-FONSI  
**GEPA:** ☐ Type A ☐ Type B ☐ None

### Level of Environmental Analysis:

- ☒ The environmental considerations noted below are based on preliminary desktop or screening level environmental analysis and are subject to revision after the completion of resource identification, delineation, and agency concurrence.
- ☐ The environmental considerations noted below are based on the completion of resource identification, delineation, and agency concurrence.

### Water Quality Requirements:

**MS4 Compliance – Is the project located in an MS4 area?** ☒ No ☐ Yes

**Is Non-MS4 water quality mitigation anticipated?** ☒ No ☐ Yes

### Environmental Permits, Variances, Commitments, and Coordination anticipated:

The proposed project would require a Section 404 Permit and Buffer Variance if construction were to impact Flint River and its buffer.

### NEPA/GEPA Comments & Information:

**NEPA:** The anticipated environmental document for the proposed project is a Categorical Exclusion. Should the project require a transportation use from a nearby Section 4(f) resource, a Section 4(f) Evaluation would be required.

**Ecology:** An Ecology report has not been prepared. Early Coordination with the Georgia Department of Natural Resources indicated nine species occurring within a three-mile radius. The US Fish and Wildlife Service replied with six species of concern. A field survey is currently underway. A Section 404 permit could be required if the river is affected by the replacement of the proposed bridge.

**History:** A History report has not yet been prepared. A desktop survey identified one property greater than 50 years of age within the project area. A field survey will be needed to determine if this property is considered eligible and if there are additional historic resources along the project corridor.

**Archaeology:** An Archaeology report has not yet been prepared. A desktop survey did not identify any previously recorded archaeological sites or cemeteries in the project area. A field survey will determine if additional archaeological resources exist along the project corridor.

**Noise:** Noise studies have not been prepared. A Type III assessment is anticipated. However, a Type I assessment would be required if the bridge alignment is significantly altered vertically or horizontally.

### Air Quality:

Is the project located in an Ozone Non-attainment area? ☒ No ☐ Yes  
Carbon Monoxide hotspot analysis required? ☒ No ☐ Yes

**Public Involvement:** Early coordination letters have been sent to local, state, and federal stakeholders during the concept phase. Due to the proximity of the Spalding County Fire Department Block Station #5 to the project location further coordination may be required. A public detour open house is not anticipated, as the preferred alternative proposes the replacement of the bridge on the new alignment.

## COORDINATION, ACTIVITIES, RESPONSIBILITIES, AND COSTS

Is Federal Aviation Administration (FAA) coordination anticipated? ☒ No ☐ Yes

### Project Meetings:

Monthly Team Meeting January 3, 2018  
Monthly Team Meeting March 7, 2018  
Concept Team Meeting May 3, 2018

**Other coordination to date:** Early coordination letters have been sent to the local government, EMS, and school board.

Project Activity	Party Responsible for Performing Task(s)
Concept Development	Volkert, Inc.
Design	Volkert, Inc.
Right-of-Way Acquisition	GDOT
Utility Coordination (Preconstruction)	GDOT
Utility Relocation (Construction)	Utility Owners
Letting to Contract	GDOT
Construction Supervision	GDOT
Providing Material Pits	Contractor
Providing Detours	Contractor
Environmental Studies, Documents, & Permits	Atkins \ Volkert, Inc
Environmental Mitigation	Atkins \ Volkert, Inc
Construction Inspection & Materials Testing	GDOT

### Project Cost Estimate and Funding Responsibilities:

	PE Activities		ROW**	Reimbursable Utilities	CST*	Total Cost
	PE Funding	Section 404 Mitigation				
Funded By	Federal / State	Federal / State	Federal / State	Federal / State	Federal / State	\$7,482,544 (total w/o ROW cost)
\$ Amount	\$500,000	\$84,045	TBD	\$165,000	\$6,733,499	<del>TBD</del> <i>KLP</i>
Date of Estimate	9/26/2016	5/15/2018	Requested	4/27/2018	5/17/2018	

\*CST Cost includes: Construction, Engineering and Inspection, Contingencies and Liquid AC Cost Adjustment.

\*\* Right of Way costs were requested from GDOT on 4/4/2018.

## ALTERNATIVES DISCUSSION

<b>Preferred Alternative:</b> Construct the proposed bridge parallel and offset to the north of the existing bridge, and remove the existing bridge.			
<b>Estimated Property Impacts:</b>	<b>12</b>	<b>Estimated Total CST Cost:</b>	<b>\$6,733,499</b>
<b>Estimated ROW Cost:</b>	<b>TBD</b>	<b>Estimated CST Time:</b>	<b>18 Months</b>
<b>Rationale:</b> This alternative was determined to be feasible because of the high traffic volume, avoidance of a long detour length, and minimal impacts to the fire station.			



<b>No-Build Alternative:</b> No proposed improvements within project limits			
<b>Estimated Property Impacts:</b>	<b>0</b>	<b>Estimated Total CST Cost:</b>	<b>0</b>
<b>Estimated ROW Cost:</b>	<b>0</b>	<b>Estimated CST Time:</b>	<b>0</b>
<b>Rationale:</b> This alternative was not selected as it does not address the structural integrity issues of the existing bridge as described in the project justification statement.			

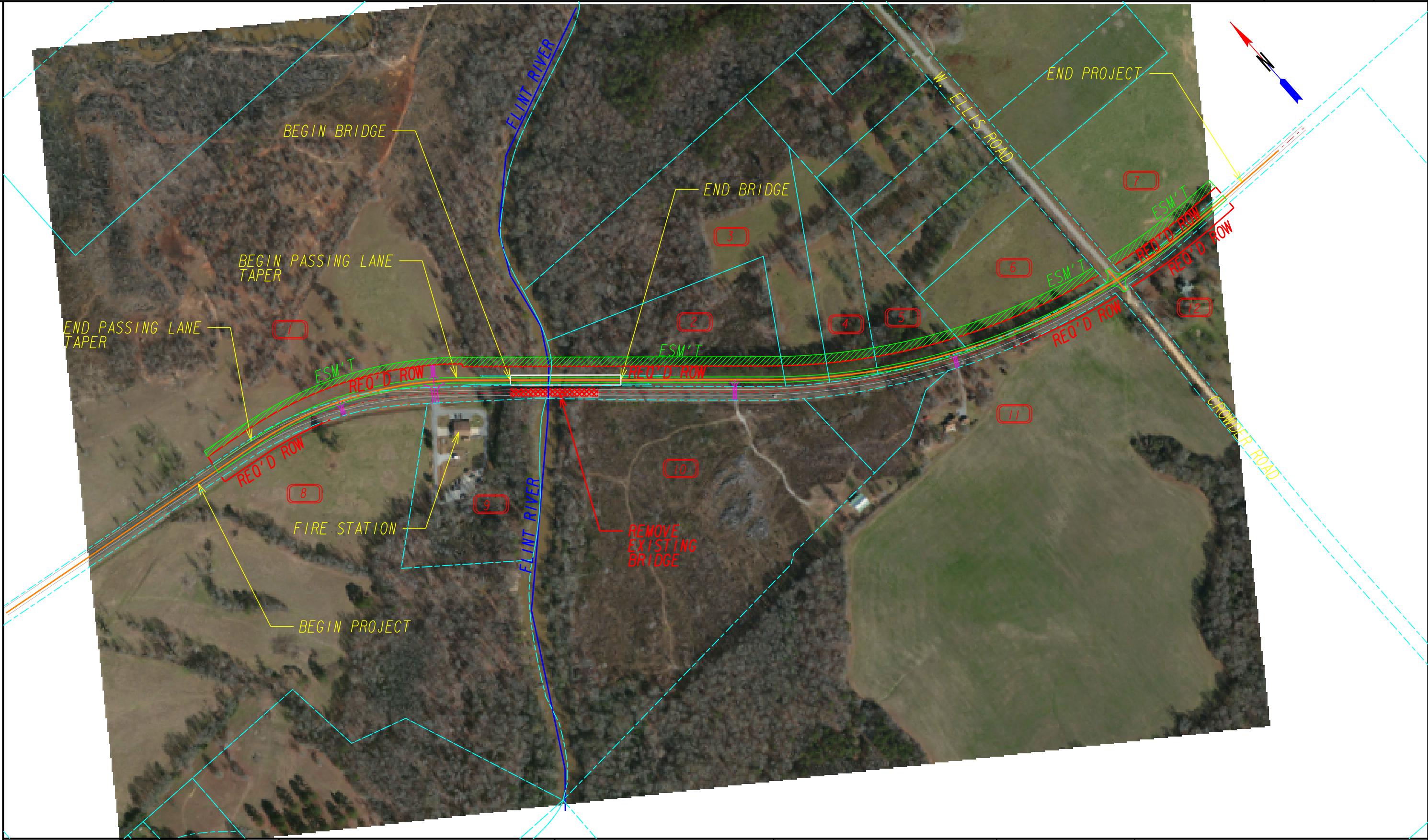
<b>Alternative 1:</b> Construct the proposed bridge parallel and offset to south of the existing bridge.			
<b>Estimated Property Impacts:</b>	<b>13</b>	<b>Estimated Total CST Cost:</b>	<b>\$6,634,916</b>
<b>Estimated ROW Cost:</b>	<b>TBD</b>	<b>Estimated CST Time:</b>	<b>18 Months</b>
<b>Rationale:</b> This alternative was not selected because realigning SR 16 to the south of the existing bridge would impact the fire station located on the south side.			

<b>Alternative 2:</b> Replace the existing bridge at the current location using an off-site detour.			
<b>Estimated Property Impacts:</b>	<b>8</b>	<b>Estimated Total CST Cost:</b>	<b>\$5,534,071</b>
<b>Estimated ROW Cost:</b>	<b>TBD</b>	<b>Estimated CST Time:</b>	<b>18 Months</b>
<b>Rationale:</b> This alternative was not selected because of the high traffic volume, detour length and the adverse effects on the fire department emergency response time. The proposed detour redirects the traffic on SR 16 to SR 85 southbound towards Meriwether County, then SR 362 eastbound and back on SR 16 for the total length of 29.1 miles. The detour will add 11.6 miles and 14 minutes to the normal route length and travel time.			

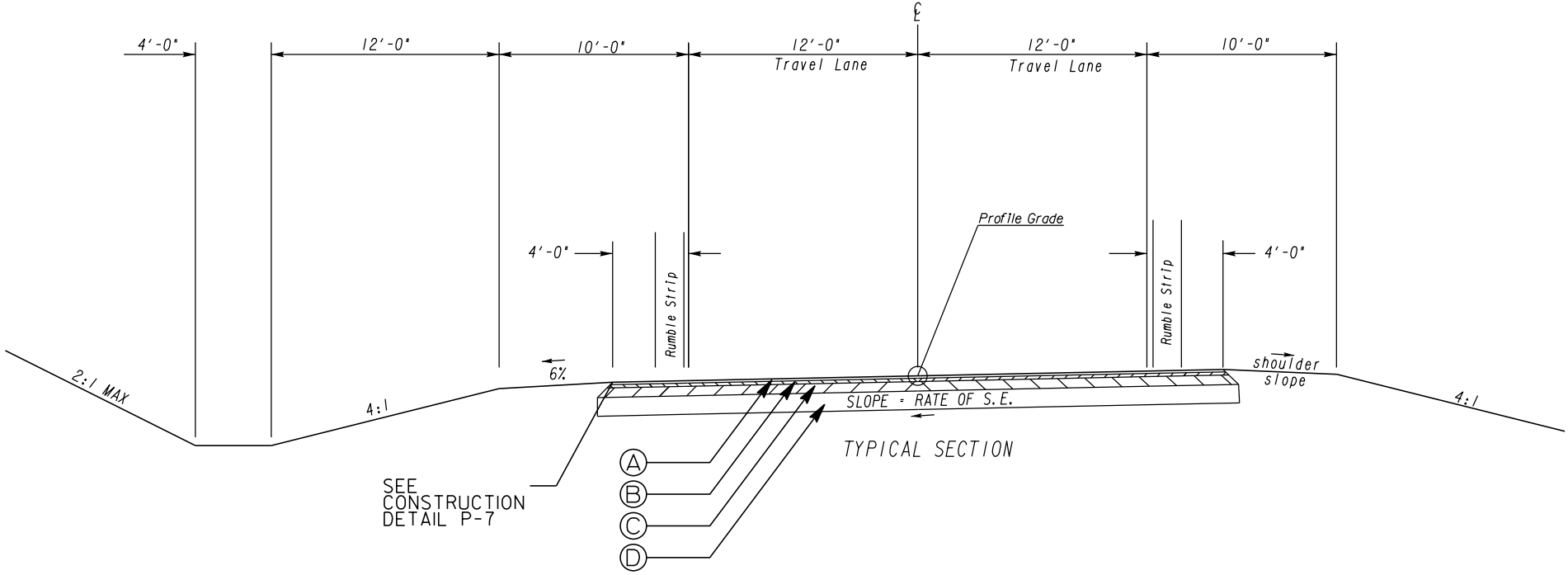
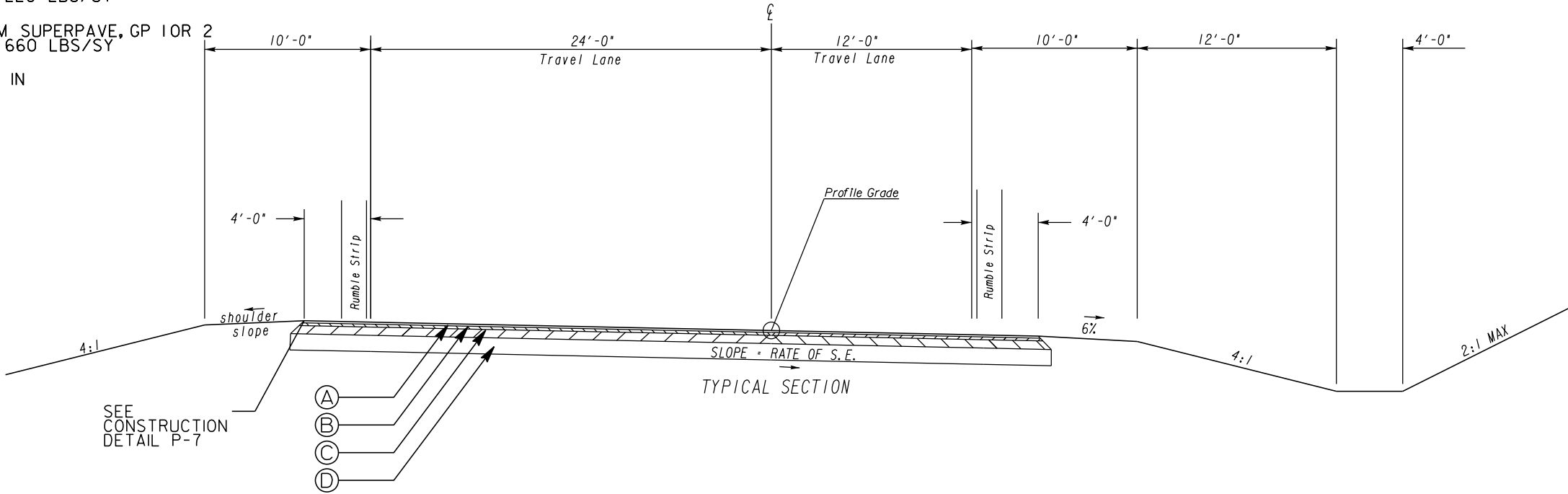
**Additional Comments/ Information:** None

## LIST OF ATTACHMENTS/SUPPORTING DATA

1. Concept Layout
2. Typical Section
3. Cost Estimate
4. Concept Utility Report
5. Utility Cost Estimate
6. ROW Cost Estimate Request
7. Mitigation Cost Estimate Document
8. Traffic Memo
9. Crash Summary
10. Detour Map
11. Bridge Inventory Report
12. Concept Team Meeting Minutes

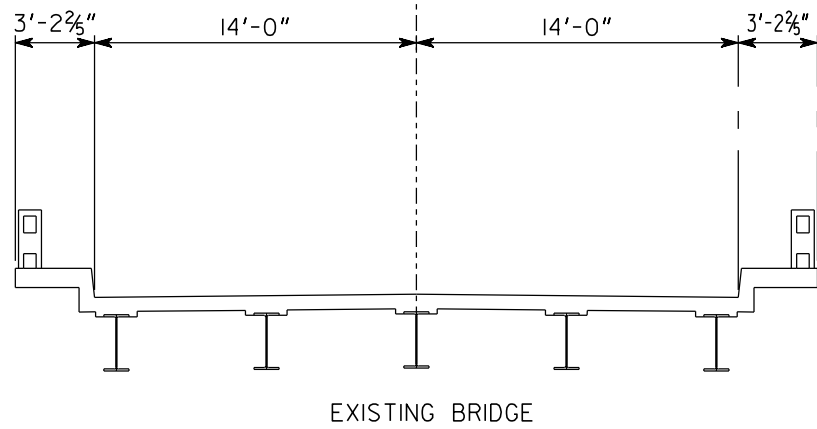
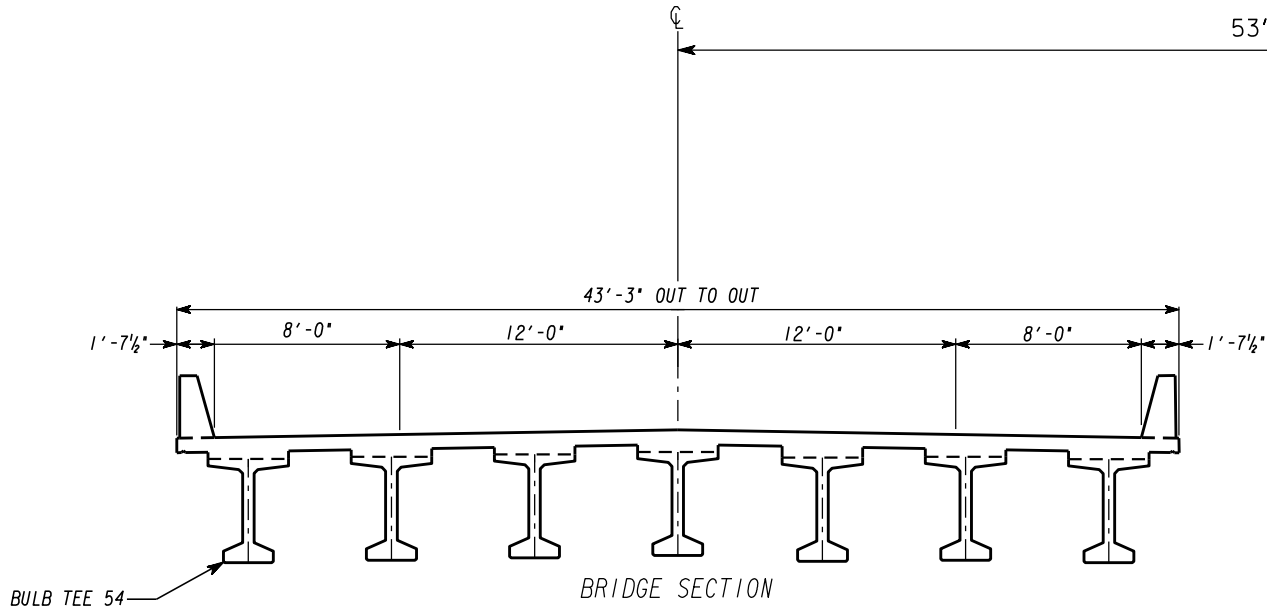
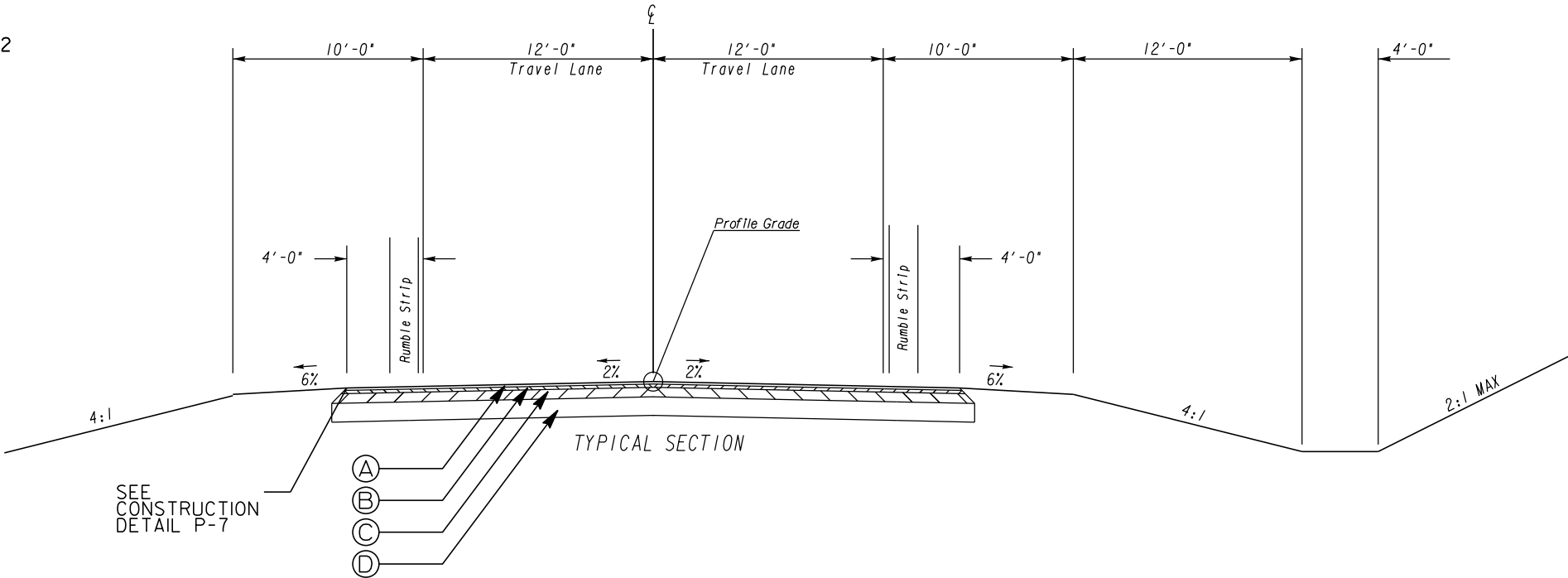


- Ⓐ RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2  
INCL BITUM MATL & H LIME, 165 LBS/SY
- Ⓑ RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2  
INCL BITUM MATL & H LIME, 220 LBS/SY
- Ⓒ RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2  
INCL BITUM MATL & H LIME, 660 LBS/SY
- Ⓓ GRADED AGGREGATE BASE, 12 IN



S.E. RATE	shoulder slope
2.0% OR 3.0%	4.0%
4.0% OR 5.0%	2.0%
6.0% OR 7.0%	1.0%
8.0 % +	0.0%

- Ⓐ RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2  
INCL BITUM MATL & H LIME, 165 LBS/SY
- Ⓑ RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2  
INCL BITUM MATL & H LIME, 220 LBS/SY
- Ⓒ RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2  
INCL BITUM MATL & H LIME, 660 LBS/SY
- Ⓓ GRADED AGGREGATE BASE, 12 IN



# DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

## INTERDEPARTMENT CORRESPONDENCE

FILE P.I. No. **0013928** OFFICE **Program Delivery**

### PROJECT DESCRIPTION

This project proposes to replace the bridge on SR 16 over Flint River in Spalding County.

DATE **June 20, 2018**

From: **Kimberly Nesbit, State Program Delivery Administrator**

To: Lisa L. Myers, State Project Review Engineer  
via Email Mailbox: [CostEstimatesandUpdates@dot.ga.gov](mailto:CostEstimatesandUpdates@dot.ga.gov)

Subject: **REVISIONS TO PROGRAMMED COSTS**

MGMT LET DATE **11/15/2020**

PROJECT MANAGER **Kenneth T. Wicks, P.E.**

MGMT ROW DATE **11/15/2019**

### PROGRAMMED COSTS (TPro W/OUT INFLATION)

### LAST ESTIMATE UPDATE

CONSTRUCTION \$ **3,900,000.00**

DATE **6/21/2017**

RIGHT OF WAY \$ **250,000.00**

DATE **6/21/2017**

UTILITIES \$

DATE

### REVISED COST ESTIMATES

CONSTRUCTION\* \$ **6,733,499.41**

RIGHT OF WAY \$

UTILITIES \$ **165,000.00**

\*Cost Contains **15** % Contingency

### **REASONS FOR COST INCREASE AND CONTINGENCY JUSTIFICATION:**

The attached estimate is being provided based on information gathered for the Limited Scope Concept Report. The proposed structure is estimated to be 480' and the total project length is estimated at 0.92 miles. A conceptual contingency of 15% is used along with current unit pricing from CES.

# CONTINGENCY SUMMARY

<b>A. CONSTRUCTION COST ESTIMATE:</b>	\$	5,470,745.26	Base Estimate From CES	
<b>B. ENGINEERING AND INSPECTION (E &amp; I):</b>	\$	273,537.26	Base Estimate (A) x	5 %
<b>C. CONTINGENCY:</b>	\$	861,642.38	Base Estimate (A) + E & I (B) x	15 %
			<a href="#">See % Table in "Risk Based Cost Estimation" Memo</a>	
<b>D. TOTAL LIQUID AC ADJUSTMENT:</b>	\$	127,574.51	Total From Liquid AC Spreadsheet	
<b>E. CONSTRUCTION TOTAL:</b>	\$	6,733,499.41	(A + B + C + D = E)	

## REIMBURSABLE UTILITY COSTS

UTILITY OWNER	REIMBURSABLE COST
Central Ga EMC	\$ 165,000.00
AT&T	\$ -
Spalding County Water	\$ -
	\$ -
<b>TOTAL</b>	<b>\$ 165,000.00</b>

### ATTACHMENTS: (File Copy in the Project Cost Estimate Folder)

Detailed Cost Estimate Printout From TRAQS  
Liquid AC Adjustment Spreadsheet



# **Consultant Validation of Final QC/QA for Construction Cost Estimate Used in This Revision To Programmed Costs**

**COMPANY NAME:** Volkert, Inc.

## **VALIDATION OF FINAL QC/QA**

**PRINTED NAME:** Benjamin F. Rabun III, P.E.

**TITLE:** Vice President

**SIGNATURE:**

**DATE:** 6/20/2018

PROJ. NO. N/A  
P.I. NO. 0013928  
DATE 6/20/2018

CALL NO. 0/00/2016

INDEX (TYPE)	DATE	INDEX
REG. UNLEADED	Jun-18	\$ 2.814
DIESEL		\$ 3.124
LIQUID AC		\$ 476.00

Link to AC Index:  
<http://www.dot.ga.gov/PS/Materials/AsphaltFuelIndex>

#### LIQUID AC ADJUSTMENTS

PA=[((APM-APL)/APL)]xTMTxAPL

##### Asphalt

Price Adjustment (PA)					122979.36	\$	122,979.36
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	761.60			
Monthly Asphalt Cement Price month project let (APL)			\$	476.00			
Total Monthly Tonnage of asphalt cement (TMT)				430.6			

ASPHALT	Tons	%AC	AC ton
Leveling	200	5.0%	10
12.5 OGFC	0	5.0%	0
12.5 mm	1544	5.0%	77.2
9.5 mm SP	0	5.0%	0
25 mm SP	5151	5.0%	257.55
19 mm SP	1717	5.0%	85.85
	8612		430.6

##### BITUMINOUS TACK COAT

Price Adjustment (PA)					\$ 4,595.15	\$	4,595.15
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	761.60			
Monthly Asphalt Cement Price month project let (APL)			\$	476.00			
Total Monthly Tonnage of asphalt cement (TMT)				16.08944805			

##### Bitum Tack

Gals	gals/ton	tons
3746	232.8234	16.0894481

##### BITUMINOUS TACK COAT (surface treatment)

Price Adjustment (PA)					0	\$	-
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	761.60			
Monthly Asphalt Cement Price month project let (APL)			\$	476.00			
Total Monthly Tonnage of asphalt cement (TMT)				0			

Bitum Tack	SY	Gals/SY	Gals	gals/ton	tons
Single Surf. Trmt.	0	0.20	0	232.8234	0
Double Surf.Trmt.	0	0.44	0	232.8234	0
Triple Surf. Trmt	0	0.71	0	232.8234	0

**TOTAL LIQUID AC ADJUSTMENT \$ 127,574.51**

STATE HIGHWAY AGENCY

JOB ESTIMATE REPORT

JOB NUMBER : 0013928                      SPEC YEAR: 13  
DESCRIPTION: SR 16 @ FLINT RIVER

ITEMS FOR JOB 0013928

LINE	ITEM	ALT	UNITS	DESCRIPTION	QUANTITY	PRICE	AMOUNT
0001	150-1000		LS	TRAFFIC CONTROL - PI 0013928	1.000	200000.00	200000.00
0002	150-5010		EA	TRAF CTRL,PORTABLE IMPACT ATTN	4.000	7857.85	31431.42
0003	153-1300		EA	FIELD ENGINEERS OFFICE TP 3	1.000	91057.55	91057.56
0004	163-0232		AC	TEMPORARY GRASSING	8.000	769.57	6156.58
0005	163-0240		TN	MULCH	186.000	219.99	40918.52
0006	163-0300		EA	CONSTRUCTION EXIT	2.000	1492.17	2984.34
0007	165-0030		LF	MAINT OF TEMP SILT FENCE, TP C	2500.000	1.35	3387.98
0008	165-0101		EA	MAINT OF CONST EXIT	2.000	595.90	1191.82
0009	167-1000		EA	WATER QUALITY MONITORING AND SAMPLING	2.000	332.78	665.58
0010	167-1500		MO	WATER QUALITY INSPECTIONS	18.000	872.77	15709.87
0011	171-0030		LF	TEMPORARY SILT FENCE, TYPE C	5000.000	3.49	17464.40
0012	210-0100		LS	GRADING COMPLETE - PI 0013928	1.000	750000.00	750000.00
0013	310-1101		TN	GR AGGR BASE CRS, INCL MATL	10537.000	23.89	251777.51
0014	402-1812		TN	RECYL AC LEVELING,INC BM&HL	200.000	103.46	20693.61
0015	402-3121		TN	RECYL AC 25MM SP,GP1/2,BM&HL	5151.000	75.27	387745.59
0016	402-3130		TN	RECYL AC 12.5MM SP,GP2,BM&HL	1544.000	92.83	143341.04
0017	402-3190		TN	RECYL AC 19 MM SP,GP 1 OR 2 ,INC BM&HL	1717.000	84.38	144885.46
0018	413-0750		GL	TACK COAT	3746.000	2.57	9627.22
0019	432-0206		SY	MILL ASPH CONC PVMT/ 1.50 DEP	3100.000	3.92	12152.00
0020	433-1000		SY	REINF CONC APPROACH SLAB	289.000	173.35	50100.32
0021	441-0301		EA	CONC SPILLWAY, TP 1	4.000	1861.96	7447.85
0022	456-2015		GLM	INDENT. RUMB. STRIPS - GRND-IN-PL (SKIP)	2.000	3145.04	6290.09
0023	540-1102		LS	REM OF EX BR, BR NO - PI 0013928	1.000	590000.00	590000.00
0025	543-9000		LS	CONSTR OF BRIDGE COMPLETE - PI 0013928	1.000	2500000.00	2500000.00
0026	550-1180		LF	STM DR PIPE 18,H 1-10	130.000	55.23	7180.16
0027	550-2180		LF	SIDE DR PIPE 18,H 1-10	70.000	34.56	2419.39
0028	550-4118		EA	FLARED END SECT 18 IN, SIDE DR	2.000	446.35	892.71
0029	550-4218		EA	FLARED END SECT 18 IN, ST DR	2.000	626.86	1253.73
0030	603-2181		SY	STN DUMPED RIP RAP, TP 3, 18	24.000	55.57	1333.81
0031	603-7000		SY	PLASTIC FILTER FABRIC	24.000	4.84	116.39
0032	610-0300		LF	REM FENCE - PI 0013928	2400.000	4.51	10843.08
0033	610-0301		EA	REM GATE - PI 0013928	2.000	357.75	715.50
0034	610-6515		EA	REM HIGHWAY SIGN, STD	15.000	75.08	1126.24
0035	611-4890		LF	RESET FENCE - PI 0013928	2400.000	13.00	31200.00
0036	611-4996		EA	RESET GATE - PI 0013928	2.000	402.99	805.99
0037	611-5360		EA	RESET HIGHWAY SIGN	15.000	112.82	1692.45
0038	620-0100		LF	TEMP BARRIER, METHOD NO. 1	1000.000	32.55	32559.56
0039	632-0003		EA	CHANGEABLE MESS SIGN,PORT,TP 3	2.000	7611.50	15223.01
0040	634-1200		EA	RIGHT OF WAY MARKERS	15.000	123.82	1857.39
0041	641-1100		LF	GUARDRAIL, TP T	83.000	71.08	5899.76
0042	641-1200		LF	GUARDRAIL, TP W	250.000	19.55	4888.53

## STATE HIGHWAY AGENCY

DATE : 06/20/2018

PAGE : 2

## JOB ESTIMATE REPORT

0043	641-5001	EA	GUARDRAIL ANCHORAGE, TP 1	2.000	951.27	1902.54
0044	641-5020	EA	GUARDRL, ANCHOR, TP 12B,31 IN, FLR, E/A	2.000	2442.52	4885.04
0045	643-8200	LF	BARRIER FENCE (ORANGE), 4 FT	500.000	1.86	933.62
0046	653-1501	LF	THERMO SOLID TRAF ST 5 IN, WHI	9000.000	0.50	4561.20
0047	653-1502	LF	THERMO SOLID TRAF ST, 5 IN YEL	9000.000	0.51	4671.90
0048	653-1704	LF	THERM SOLID TRAF STRIPE,24,WH	36.000	9.14	329.39
0049	653-3501	GLF	THERMO SKIP TRAF ST, 5 IN, WHI	700.000	0.50	352.55
0050	653-6006	SY	THERM TRAF STRIPING, YELLOW	480.000	4.95	2377.82
0051	654-1001	EA	RAISED PVMT MARKERS TP 1	245.000	4.80	1176.05
0052	654-1003	EA	RAISED PVMT MARKERS TP 3	18.000	5.73	103.23
0053	657-1085	LF	PRF PL SD PVT MKG,8,B/W,TP PB	960.000	6.76	6495.03
0054	657-6085	LF	PRF PL SD PVMT MKG,8,B/Y,TPPB	960.000	6.85	6582.94
0055	700-6910	AC	PERMANENT GRASSING	15.000	1332.81	19992.29
0056	700-7000	TN	AGRICULTURAL LIME	8.000	156.14	1249.16
0057	700-8000	TN	FERTILIZER MIXED GRADE	4.000	614.95	2459.82
0058	700-8100	LB	FERTILIZER NITROGEN CONTENT	747.000	2.53	1894.32
0059	716-2000	SY	EROSION CONTROL MATS, SLOPES	5000.000	1.14	5741.90

ITEM TOTAL

5470745.23

INFLATED ITEM TOTAL

5470745.23

TOTALS FOR JOB 0013928

ESTIMATED COST:

5470745.26

CONTINGENCY PERCENT ( 0.0 ):

0.00

ESTIMATED TOTAL:

5470745.26



**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

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**INTERDEPARTMENT CORRESPONDENCE**

**FILE**

Project No: Office: D3 - UTILITIES  
County **SPALDING** Date: 04/27/2018  
P.I. # **0013928**  
Description: **SR16 @ FLINT RIVER 8 MI W OF GRIFFIN**

**FROM** Scott K. Parker, District Utilities Manager

**TO** Kenneth Wicks, Project Manager

**SUBJECT** **PRELIMINARY UTILITY COST ESTIMATE**

A review of utilities located on the above referenced project has been conducted with Concept Layout plans. Listed below is a breakdown of the anticipated reimbursable and non-reimbursable cost.

<u>Utility Owner</u>	<u>Reimbursable</u>	<u>Non-Reimbursable</u>	<u>Estimate Based on</u>
Central Ga EMC	\$165,000.00	\$0.00	Site Visit / Available Drawings
AT&T	\$0.00	\$58,000.00	Site Visit / Available Drawings
Spalding County Water	\$0.00	\$210,000.00	Site Visit / Available Drawings
	\$0.00	\$0.00	
	\$0.00	\$0.00	
	\$0.00	\$0.00	
	\$0.00	\$0.00	
	\$0.00	\$0.00	
	\$0.00	\$0.00	
	\$0.00	\$0.00	
	\$0.00	\$0.00	
	\$0.00	\$0.00	
<b>Total 0.00%</b>	<b>\$ 165,000.00</b>	<b>\$ 268,000.00</b>	
<b>Department Responsibility 100.00%</b>	<b>\$ 165,000.00</b>	<b>\$ 268,000.00</b>	
<b>Local Sponsor Responsibility 0.00%</b>	<b>\$ 0.00</b>	<b>\$ 0.00</b>	<b>PFA Dated N/A with N/A</b>

\*\* Indicates Potential Utility Aid Request from Local Gov't

Estimate is based on the best available information at the current stage, unforeseen prior rights information may be provided by the Utility Company at a later date that could cause some non-reimbursable costs to shift to the reimbursable cost column.

If additional information is needed, please contact Scott Parker at 706-646-7603.

cc: Yulonda Pride-Foster, State Utilities Preconstruction Manager  
Patrick Allen, State Utilities Administrator  
Adam Smith, District Preconstruction Engineer



## Eshagieh, Abbas

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**From:** Eshagieh, Abbas  
**Sent:** Friday, March 9, 2018 4:11 PM  
**To:** 'Wicks, kenneth'  
**Cc:** Rabun, Ben  
**Subject:** Bridge Bundle 3 Contract 11 - ROW and Utilities Cost Estimate Request  
**Attachments:** 0013928 Alternative 1- RIGHT OF WAY Cost Estimate Package.pdf; 0013928 Preferred Alternative- RIGHT OF WAY Cost Estimate Package.pdf; 0013930 Alternative 1- RIGHT OF WAY Cost Estimate Package.pdf; 0013930 Preferred Alternative- RIGHT OF WAY Cost Estimate Package.pdf; 0013991 Preferred Alternative- RIGHT OF WAY Cost Estimate Package.pdf

Ken,

Please see ROW and Utilities Cost Estimate Request Package for 0013928, 0013930 and 0013991 attached.

Thanks

Abbas Eshagieh, PE  
Project Manager  
Volkert, Inc.  
Cell 404-313-9298  
[abbas.eshagieh@volkert.com](mailto:abbas.eshagieh@volkert.com)

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## Eshagieh, Abbas

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**From:** Borovich, Henry <Henry.Borovich@atkinsglobal.com>  
**Sent:** Friday, May 4, 2018 5:08 AM  
**To:** Eshagieh, Abbas  
**Subject:** FW: Bridge Bundle 3 Contract 11 - Mitigation

Mitigation cost estimates below.

**Henry Borovich, AICP**  
**Project Director**  
**Atkins**

1600 RiverEdge Parkway, Suite 600, Atlanta, Georgia 30328  
Tel: (770) 933-0280 | Fax: (770) 933-1083  
Email: [henry.borovich@atkinsglobal.com](mailto:henry.borovich@atkinsglobal.com) | Web: [www.atkinsglobal.com](http://www.atkinsglobal.com)

---

**From:** Ricks, Rebecca G  
**Sent:** Thursday, May 03, 2018 4:11 PM  
**To:** Borovich, Henry <Henry.Borovich@atkinsglobal.com>  
**Cc:** Margut, Michael M <Michael.Margut@atkinsglobal.com>; Shouse, Rachel <Rachel.Shouse@atkinsglobal.com>; Jamell, Josh J <Josh.Jamell@atkinsglobal.com>  
**Subject:** RE: Bridge Bundle 3 Contract 11 - Mitigation

Henry,  
I've included the estimates below. These estimates are based on NWI and NHD datasets and are based on highest possible impacts (i.e. fill within the entire study area) to generate a worst-case scenario impacts cost. While we have been in the field for 13991 and 13928 (and partly for 13930), the field data hasn't been completely post-processed, so I did not use that at this time. Obviously, mitigation would be expected to be very different once we complete post-processing and field work and have a better idea of the proposed impacts.

0013991 - DeKalb  
Total credits needed: 1,780 stream credits, Upper Chattahoochee (03130001) HUC  
Estimated cost: \$71,200

0013928 – Spalding  
Total credits needed: 1,715 stream credits, 9.72 wetlands credits Upper Flint (03130005) HUC  
Estimated cost: \$84,045

0013930 – Coweta  
Total credits needed: 3,087 stream credits, Upper Flint (03130005) HUC  
Estimated Cost: \$46,314

**Rebecca Ricks**  
e-mail: [rebecca.ricks@atkinsglobal.com](mailto:rebecca.ricks@atkinsglobal.com)  
Direct: 678-247-2467 Office: 770-933-0280  
1600 RiverEdge Parkway, NW, Suite 700, Atlanta, Georgia, 30328

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**From:** Borovich, Henry  
**Sent:** Tuesday, May 01, 2018 1:33 PM



Volkert, Inc.

160 Greencastle Road, Suite A  
Tyrone, GA 30290  
Office: 678.271.0202

[www.volkert.com](http://www.volkert.com)

MEMORANDUM TO: Kenneth Wicks  
Georgia Department of Transportation, Office of Planning

FROM: Benjamin F. Rabun III, P.E.  
Volkert, Inc.

DATE: 06-06-2018

SUBJECT: Traffic Assignments for PI# 0013928, Spalding, SR 16 @ FLINT  
RIVER 8 MI W OF GRIFFIN

Volkert is furnishing Traffic Assignments for the above project as follows:

**BRIDGE- ID 255-0012-0**

	2018 (Existing Year)	2023 (Base Year)	2025 (Base Year +2)	2043 (Design Year)	2045 (Design Year + 2)
AADT	7865	7525	7675	9200	9375
DHV (AM/PM)	678/785	715/ 825	750/ 865	790/ 910	830/ 955
K% (AM/PM)	8.0%/ 9.5%				
D% (AM/PM)	51.5%/ 53.0%				
24 HR. T% - S.U.	16.0%				
24 HR. T% - COMB.	4.5%				
24 HR. T% - TOTAL	21.0%		Same as Existing Year		
T% - S.U. (AM/PM)	12.5%/ 14.5%				
T% - COMB. (AM/PM)	4.5%/ 2.5%				
T% - TOTAL (AM/PM)	17.0%/ 17.0%				

If you have any questions concerning this information, please contact Ben Rabun at 678-271-0202 or [ben.rabun@volkert.com](mailto:ben.rabun@volkert.com).

***Crash Data for the Most Recent Three Years 2016 to 2018***  
***SR 16 @ Flint River***

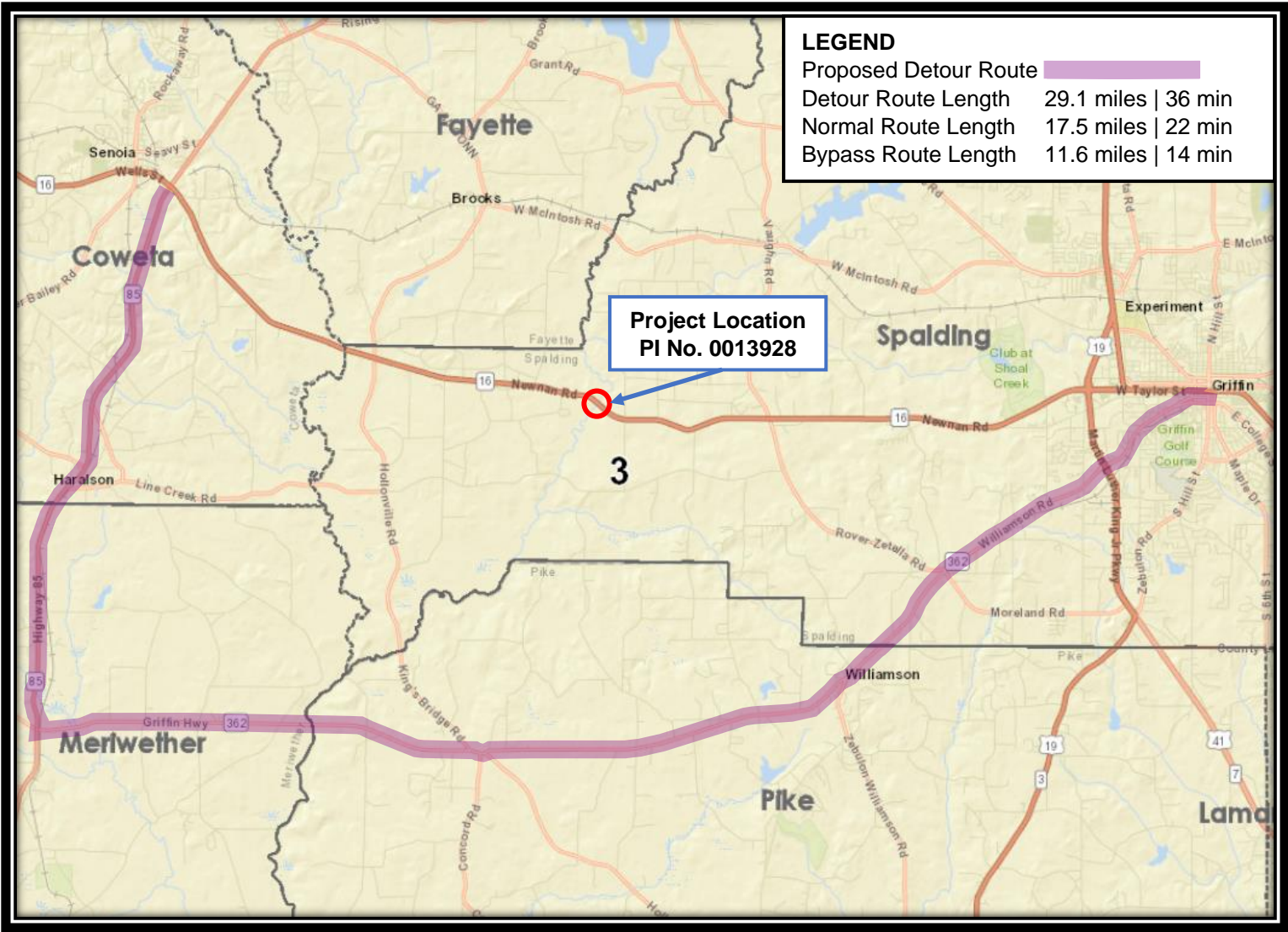
<i>2016</i>	<i>Number of Incidents</i>	<i>Injury</i>	<i>Fatality</i>
<i>Out of Control</i>	<i>1</i>	<i>0</i>	<i>0</i>
<b><i>Total</i></b>	<b><i>1</i></b>	<b><i>0</i></b>	<b><i>0</i></b>

<i>2017</i>	<i>Number of Incidents</i>	<i>Injury</i>	<i>Fatality</i>
<i>Rear End</i>	<i>2</i>	<i>1</i>	<i>0</i>
<i>Out of Control</i>	<i>5</i>	<i>0</i>	<i>0</i>
<i>Angle</i>	<i>2</i>	<i>1*</i>	<i>0</i>
<b><i>Total</i></b>	<b><i>9</i></b>	<b><i>2</i></b>	<b><i>0</i></b>

<i>2018</i>	<i>Number of Incidents</i>	<i>Injury</i>	<i>Fatality</i>
<i>Rear End</i>	<i>1</i>	<i>3</i>	<i>0</i>
<i>Side Swipe</i>	<i>1</i>	<i>1</i>	<i>0</i>
<b><i>Total</i></b>	<b><i>2</i></b>	<b><i>4</i></b>	<b><i>0</i></b>

***\* According to the accident report, the contributing factor was determined to be "Mechanical or Vehicle Failure" at the time of accident.***

PROJECT DETOUR MAP



# Bridge Inventory Data Listing Georgia Department of Transportation

Processed Date:1/2/2018

## Parameters: Bridge Serial Number

Bridge Serial Number: 255-0012-0

County: Spalding

SUFF. RATING: 54.7

### Location & Geography

218 Datum:

0- Not Applicable

### Signs & Attachments

**Structure ID:** 255-0012-0

200 Bridge Information: 07

\*6 Feature Intersected: FLINT RIVER

\*7A Route Number Carried: SR00016

\*7B Facility Carried: SR 16

9 Location: 8 MI W OF GRIFFIN

2 GDOT District: 4841300000 - D3 District Three Thomaston

\*91 Inspection Frequency: 24 Date: 08/22/2016

92A Fracture Critical Insp. Freq: 0 Date: 02/01/1901

92B Underwater Insp Freq: 60 Date: 08/09/2017

92C Other Spc. Insp Freq: 0 Date: 02/01/1901

\* 4 Place Code: 00000

\*5A Inventory Route(O/U): 1

5B Route Type: 3 - State

5C Service Designation: 1- Mainline

5D Route Number: 00016

5E Directional Suffix: 0. Not applicable

\*16 Latitude: 33 - 14.6497

\*17 Longitude: 84 - 25.7138

98A Border Bridge: 0 98B: GA% 00

99 ID Number: 000000000000000

\*100 STRAHNET: 0- The Feature is not a STRAHNET route.

12 Base Highway Network: Yes

13A LRS Inventory Route: 2551001600

13B Sub Inventory Route: 0

101 Parallel Structure: N. No parallel structure exists

\*102 Direction of Traffic: 2- Two Way

\*264 Road Inventory Mile Post: 4.05

\*208 Inspection Area: Area 03

\*104 Highway System: 1-Inventory Route is on the NHS

\*26 Functional Classification: 6- Rural - Minor Arterial

\*204A Federal Route Type: F - Primary.

\*204B Federal Route Number: 00221

105 Federal Lands Highway: 0. Not applicable

\*110 Truck Route: 0- The Feature is not part of the National Network for Trucks

217 Benchmark Elevation: 0000.00

\* Location ID No: 255-00016D-004.15E

\*19 Bypass Length: 10

\*20 Toll: 3- On a Free Road or Non-Highway

\*21 Maintenance Responsibility: 01-State Highway Agency.

\*22 Owner: 01-State Highway Agency.

\*31 Design Load: 6- HS 20 + Mod (2-24,000# Axles @ 4ft Ctrs., when they govern)

37 Historical Significance: 5- Not eligible for the National Register of Historic Places

205 Congressional District: 003

27 Year Constructed: 1960

106 Year Reconsructed: 0

33 Bridge Median: 0-None

34 Skew: 0

35 Structure Flared: No

38 Navigation Control: 0- Navigation is not controlled by an Agency

213 Special Steel Design: 0- Not applicable or other

267A Type Paint Super Structure: 5- Waterborne System (Type VI or VII) Year : 1999

267B Type Paint Sub Structure: 5 - Waterborne System (Type VI or VII). Year : 1999

\*42A Type of Service On: 1-Highway

\*42B Type of Service Under: 5-Waterway

214A Movable Bridge: 0

214B Operator on Duty: 0

203 Type Bridge: 0 - Multiple combinations (be sure the different types are on file).  
N. Steel-Concrete N. Steel-Concrete O. Concrete

259 Pile Encasement: 0

\*43A Structure Type Main material: 3-Steel

\*43B Structure Type Main Type: 2-Stringer/Multi-Beam or Girder

45 Number of Main Spans: 3

44 Structure Type Approach: A:1- Concrete B: 4- Tee Beam

46 Number of Approach Spans: 5

226 Bridge Curve: A: Vertical: NoB: Horizontal: No

111 Pier Protection: N - Navigation Control item coded 0, or Feature not a waterway

107 Deck Structure Type: 1 - C-I-P Portland Cement Concrete - Epoxy Coated Rebars

108A Wearing Surface Type: 1. Concrete

108B Membrane Type: 0. None

108C Deck Protection: 0. None

225 Expansion Joint Type: 02- Open or sealed concrete joint (silicone sealant).

242 Deck Drains: 1- Open Scuppers.

243A Parapet Location: 0- None present.

243B Parapet Height: 0.00

243C Parapet Width: 0.00

238A Curb Height: 1.2

238B Curb Material: 1- Concrete.

239A Handrail Left: 1- Concrete.

239B Handrail Right: 1- Concrete.

\*240 Median Barrier Rail: 0- None.

241A Bridge Median Height: 0

241B Bridge Median Width: 0

\*230A Guardrail Location Direction Rear: 3- Both sides.

\*230B Guardrail Location Direction Fwr: 3- Both sides.

\*230C Guardrail Location Opposing Rear: 0- None.

\*230D Guardrail Location Opposing Fwr: 0- None.

244 Approach Slab: 0- None.

224 Retaining Wall: 0- None.

233 Posted Speed Limit: 55

236 Warning Sign: No

234 Delineator: Yes

235 Hazard Boards: Yes

237A Gas: 00- Not Applicable

237B Water: 00- Not Applicable

237C Electric: 00- Not Applicable

237D Telephone: 22- Bottom Right.

237E Sewer: 00- Not Applicable

247A Lighting: Street: No

247B Navigation: No

247C Aerial: No

\*248 County Continuity No.: 03

36A Bridge Railings: 2- Inspected feature meets acceptable construction date standards.

36B Transition: 2- Inspected feature meets acceptable construction date standards.

36C Approach Guardrail: 1- Meets current standards

36D Approach Guardrail Ends: 1- Meets current standards



# Bridge Inventory Data Listing Georgia Department of Transportation

Processed Date:1/2/2018

Bridge Serial Number: 255-0012-0

County: Spalding

SUFF. RATING: 54.7

## Programming Data

201 Project Number: BA (4) SP 977 (3)  
 202 Plans Available: 4- Plans in Infolmage.  
 249 Proposed Project Number: 000000000000000000000000  
 250A Reconstruction Approval Status: No  
 250B Route Approval Status: No  
 250C Approval Status Definition: 0  
 250D Approval Status Federal: 0  
 251Project Identification Number: 0013928  
 252 Contract Date: 02/01/1901  
 260 Seismic Number: 00000  
 75A Type Work Proposed: 0- Not Applicable  
 75B Work Done by: 0- Initial Inventory  
 94 Bridge Improvement Cost:(X\$1,000) \$1,485  
 95 Roadway Improvement Cost: (X\$1,000) \$148  
 96 Total Improvement Cost: (X\$1,000) \$2227  
 76 Improvement Length: 0.0'  
 97 Year Improvement Cost Based On: 2013  
 114 Future AADT: 10740  
 115 Future AADT Year: 2032

## Measurements:

\*29 AADT: 7160  
 \*30 AADT Year: 2012  
 109 % Truck Traffic: 1  
 \* 28A Lanes On: 2  
 \*28B Lanes Under: 0  
 210A Tracks On: 00  
 210B Tracks Under: 0  
 \* 48 Maximum Span Length: 60  
 \* 49 Structure Length: 380  
 51 Bridge Roadway Width: 28.0'  
 52 Deck Width: 34.4'  
 \* 47 Total Horizontal Clearance: 28.0'  
 50A Curb / Sidewalk Width Left: 2.0  
 50B Curb / Sidewalk Width Right: 2.0  
 32 Approach Rdwy. Width: 29.0'  
**\*229 Approach Roadway**  
*Rear Shoulder Left Width:* 3 *Right Width:*3.0 Type: 2 - Asphalt.  
*Fwd Shoulder Left Width:* 3 *Right Width:*3.0 Type: 2 - Asphalt.  
*Rear Pavement Width:* 23.0 *Type:*2- Asphalt.  
*Forward Pavement Width:* 23.0 *Type:*2- Asphalt.  
*Intersection Rear:* 0 *Forward:*0

## Ratings and Posting

65 Inventory Rating Method: 1-Load Factor (LF)  
 63 Operating Rating Method: 1-Load Factor (LF)  
 66A Inventory Type: 2 - HS loading.  
 66B Inventory Rating: 21  
 64A Operating Type: 2 - HS loading.  
 64B Operating Rating: 29

## 231Calculated Loads

231A *H-Modified:* 20  
 231B *Type3/Tandem:* 28  
 231C *Timber:* 36  
 231D *HS-Modified:* 25  
 231E *Type 3S2:* 40  
 231F *Piggyback:* 40

261 H Inventory Rating: 20  
 262 H Operating Rating: 35  
 67 Structural Evaluation: 4  
 58 Deck Condition: 6 - Satisfactory Condition  
 59 Superstructure Condition: 6 - Satisfactory Condition  
 \* 227 Collision Damage:  
 60A Substructure Condition: 6 - Satisfactory Condition  
 60B Scour Condition: 7 - Good Condition

60C Underwater Condition: 7 - Good Condition  
 71 Waterway Adequacy: 6-Equal to present minimum criteria.  
 61 Channel Protection Cond.: 6-Equal to present minimum criteria.

68 Deck Geometry: 4  
 69 UnderClr. Horz/Vert: N  
 72 Approach Alignment: 6-Minor reduction of vehicle operating speed required.  
 62 Culvert: N - Not Applicable  
 70 Bridge Posting Required: 5. Equal to or above legal loads  
 41 Struct Open, Posted, CL: A. Open, no restriction  
 \* 103 Temporary Structure: No

## 232 Posted Loads

232A *H-Modified:* 00  
 232B *Type3/Tandem:* 00  
 232C *Timber:* 00  
 232D *HS-Modified:* 00  
 232E *Type 3s2:* 00  
 232F *Piggyback:* 00  
 253 Notification Date: 02/01/1901  
 258 Federal Notify Date: 02/01/1901

## Hydraulic Data

113 Scour Critical: U. No Load Rating; no scour critical data entered.  
 216A Water Depth: 7.2  
 216B Bridge Height: 18.1  
 222 Slope Protection: 1  
 221A Spur Dike Rear:  
 221B Spur Dike Fwd:  
 219 Fender System: 0- None.  
 220 Dolphin:  
 223A Culvert Cover: 000  
 223B Culvert Type: 0- Not Applicable  
 223C Number of Barrels: 0  
 223D Barrel Width: 0.0  
 223E Barrel Height: 0.0  
 223F Culvert Length: 0.0  
 223G Culvert Apron: 0  
 39 Navigation Vertical Clearance: 0'  
 40 Navigation Horizontal Clearance: 0  
 116 Navigation Vertical Clear Closed: 0

53 Minimum Vertical Clearance Over Rd:

54A Under Reference Feature: N- Feature not a highway or railroad.  
 54B Minimum Clearance Under: 0' 0"

## \*228 Minimum Vertical Clearance

228A *Actual Odometer Direction:* 99'99"  
 228B *Actual Opposing Direction:* 99'99"  
 228C *Posted Odometer Direction:* 00'00"  
 228D *Posted Opposing Direction:* 00'00"  
 55A Lateral Underclearance Reference: N- Feature not a highway or railroad.  
 55B Lateral Underclearance on Right: 0.0  
 56 Lateral Underclearance on Left: 0.0  
 10A Direction of Travel for Max Min: 0  
 10B Max Min Vertical Clearance: 99'99"  
 245A Deck Thickness Main: 6.3  
 245B Deck Thickness Approach: 6.3  
 246 Overlay Thickness: 0

## **MEETING Summary**

SUBJECT: PI 0013928 Concept Team Meeting  
LOCATION: GDOT District 3 Office, Thomaston, Auditorium C  
DATE: 05/03/2018 at 10:00 AM  
ATTENDEES: See Sign-in Sheet  
COPIES: Attendees  
MINUTES BY: Abbas Eshagieh-Meybodi, PE  
ISSUE DATE: 05/03/2018

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Abbas introduced the project.

Abbas presented the project details and read the justification statement.

The existing bridge was designed for HS-20 vehicle, which is below the current design standards. The substructure has a lower than expected carrying capacity. The bridge is classified as having an unknown foundation.

SR 16 is classified as a rural minor arterial

Existing typical section has 11.5' lanes with 3' shoulders.

SR 16 runs East-West over Flint River.

55 mph is the posted speed limit.

Proposed bridge is 480' long by 43.25' wide

Bridge will be replaced parallel and offset to the north of the existing bridge. The bridge elevation will be determined after the bridge hydraulic analysis is completed.

8' shoulder was selected per bridge manual (based on traffic volumes).

The proposed typical section includes 12' lanes with 10' shoulders.

Existing ROW along the proposed project corridor is 170'.

Preferred alternate is parallel offset alignment to the north because of high traffic volumes, avoidance of a long detour length and minimal impacts to the fire station.

No Design Variances or Design Exceptions are anticipated.

SUE is not required.

Utilities will be impacted for this project.

Utility cost estimate has been provided.

\$6.2 million is current construction cost estimate.

The current programmed cost for ROW is \$250k. This amount is being used as part of the cost estimate until ROW cost by GDOT is provided.

Total cost is estimated at \$7.1 million - including ROW cost.



**Volkert, Inc.**

101 Marietta Street, NW, Suite 2400

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Alternates: Preferred alternate is parallel offset alignment to the north. Other alternates considered include no build, parallel offset alignment to the south and off-site detour.

Carol recommended \$45 per sqft be used to estimate the removal cost of the existing bridge.

Carol requested sufficiency rating of the existing bridge be removed from the concept report.



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PURPOSE: PI 0013928 CONCEPT TEAM MEETING

LOCATION: GDOT DISTRICT 3 OFFICE

DATE: 05/03/2018 TIME: 10:00 AM

MODERATOR: Abbas Eshagieh, Volkert

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26	Carol Kalafut	GDOT via phone		
27	Suncia Beba	GDOT via phone		
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